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(54) Title: **METHODS AND COMPOSITIONS FOR REGULATING DEVELOPMENTAL IDENTITY**

(57) Abstract: Purified PKL proteins that function in regulating developmental identity in host cells are provided. Nucleotide sequences encoding functional PKL proteins are also provided. The invention also provides recombinant vectors including the nucleotide sequences encoding PKL, eukaryotic host cells and transgenic plants that include the introduced nucleotide sequences described herein, and methods of transforming plants utilizing the constructs described herein.

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